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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,980	03/20/2001	In Ho Choi	2080-3-09	1464
35884	7590	02/04/2005	EXAMINER	
LEE, HONG, DEGERMAN, KANG & SCHMADEKA, P.C. 801 SOUTH FIQUEROA STREET 14TH FLOOR LOS ANGELES, CA 90017			AGUSTIN, PETER VINCENT	
			ART UNIT	PAPER NUMBER
			2652	

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/812,980	Applicant(s) CHOI, IN HO	
	Examiner Peter Vincent Agustin	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the Office Action mailed September 29, 2004 has been withdrawn due to the new grounds of rejection as set forth below.

Claim Objections

2. Claims 13 & 14 are objected to because of the following informalities:

Claim 13, line 2: "first magnet" should be --second magnet--.

Claim 14, line 2: "first magnet" should be --second magnet--.

Note that the above errors have been previously addressed by the examiner and corrected by the applicant on the amendment of June 14, 2004. Therefore, the versions of claims 13 & 14 presented on the amendment of January 4, 2005 are not the latest versions of the claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitations "first magnet means operated by a moving coil system" and "second magnet means operated by a moving magnet system", which recitations render the claim indefinite. The claimed "moving coil system" is known in the art to comprise a) coils attached to a moving portion of an optical pick-up and b) magnets attached to a stationary portion of the optical pick-up, which magnets interact with the corresponding coils to cause movement of the moving portion. Therefore, the recitation that a "first magnet means" is

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operated by a moving coil system is misdescriptive because the magnet itself is a part of the moving coil system, and there is no separate magnet being operated by the moving coil system. Likewise, the claimed "moving magnet system" is known in the art to comprise a) magnets attached to a moving portion of an optical pick-up and b) coils attached to a stationary portion of the optical pick-up, which coils interact with the corresponding magnets to cause movement of the moving portion. Therefore, the recitation that a "second magnet means" is operated by a moving magnet system is misdescriptive because the magnet itself is a part of the moving magnet system, and there is no separate magnet being operated by the moving magnet system.

Claims 13 & 14 are dependent upon claim 12.

5. Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

In regard to claim 12, the structural cooperative relationship between the claimed "first magnet means operated by a moving coil system to conduct tracking and focusing operations" and the claimed "second magnet means operated by a moving magnet system to conduct a tilt compensating operation" has been omitted.

Claims 13 & 14 are dependent upon claim 12.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takishima (US 6,515,947) in view of Nagasato (US 6,181,670).

In regard to claim 12, Takishima discloses (as best interpreted by the examiner in light of the 112-2nd paragraph rejection above) an optical pick-up actuator (Figure 4) mounted with an object lens and driven by a magnetic suspension, thereby recording information on a disk and reproducing the recorded information from a disk, comprising first magnet means operated by a moving coil system to conduct tracking and focusing operations (column 4, lines 33-38). However, in regard to claim 12, Takishima does not disclose second magnet means operated by a moving magnet system to conduct a tilt compensating operation.

Nagasato discloses (as best interpreted by the examiner in light of the 112-2nd paragraph rejection above) an optical pick-up actuator (Figures 1 & 2) comprising second magnet means operated by a moving magnet system to conduct a tilt compensating operation (column 12, lines 14-26). It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have added the second magnet means operated by a moving magnet system to conduct a tilt compensating operation of Nagasato to the optical pick-up actuator of Takishima, the motivation being to correct the tilt of an objective lens and reducing aberration, thereby preventing deterioration of reproducing performance (see abstract, lines 1-5; column 1, line 66 thru column 2 line 8; column 12, lines 55-62).

In regard to claim 13, Nagasato and hence the obvious combination noted above, discloses that the second magnet means is adapted to conduct a tilt compensation in a tangential direction and a tilt compensation in a radial direction (see column 8, lines 59-64).

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In regard to claim 14, Nagasato and hence the 'obvious combination noted above, discloses that the second magnet means comprises a magnet unit for conducting a tilt compensation in a tangential direction, and a magnet unit for conducting a tilt compensation in a radial direction (column 8, lines 59-64: note "plurality of component magnetic circuits").

Allowable Subject Matter

8. After further consideration, the indicated allowability of claims 12-14 has been withdrawn in view of new grounds of rejection, i.e., under 35 U.S.C. 112, 2nd paragraph (see items 4 & 5 above); and under 35 U.S.C. 103(a) (see item 7 above).

9. Claim 20 is allowed over the prior art of record.

10. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record alone or in combination fails to teach or suggest as a whole, an optical pick-up actuator comprising: a moving part which includes a lens holder mounted with an object lens, a magnet and coils at an outer surface of said moving part; a fixed part which includes a magnet attached on a yoke and coils at an outer surface of said fixed part; and a plurality of supporting means adapted to support said moving part; wherein said moving part and said fixed part have a configuration of a combination of a moving coil system (which is known in the art as a system comprising coils attached to a moving portion of an optical pick-up and magnets attached to a stationary portion of the optical pick-up, which magnets interact with the corresponding coils to cause movement of the moving portion) and a moving magnet system (which is known in the art as a system comprising magnets attached to a moving portion of an optical pick-up and coils attached to a stationary portion of the optical pick-up, which coils interact with the corresponding magnets to cause movement of the moving portion); wherein a

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flux linkage resulting from the magnetic circuit of both said moving part and said fixed part exists in a space between said moving part and said fixed part.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 703-305-8980. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin
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BRIAN E. MILLER
PRIMARY EXAMINER